

Exploration Architecture Options - ECLSS, EVA, TCS Implications

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Many options for exploration of space have been identified and evaluated since the Vision for Space Exploration (VSE) was announced in 2004. Lunar architectures have been identified and addressed in the Lunar Surface Systems team to establish options for how to get to and then inhabit and explore the moon. The Augustine Commission evaluated human space flight for the Obama administration and identified many options for how to conduct human spaceflight in the future. This paper will evaluate the options for exploration of space for the implications of architectures on the Environmental Control and Life Support (ECLSS), ExtraVehicular Activity (EVA) and Thermal Control System (TCS) Systems. The advantages and disadvantages of each architecture and options are presented.

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